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ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO. CORINNE DEGERT 00108 8317 09/554,602 07/14/2000 23338 7590 03/27/2002 DENNISON, SCHULTZ & DOUGHERTY EXAMINER 1745 JEFFERSON DAVIS HIGHWAY KISHORE, GOLLAMUDI S ARLINGTON, VA 22202 ART UNIT PAPER NUMBER 1615 DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No. 09/554,602

Applicant(s)

Examiner

Gollamudi S. Kishore, Ph.D

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The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
 Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, be considered timely. 	ation. , a reply within the statutory minimum of thirty (30) days will
 If NO period for reply is specified above, the maximum statutory period communication. Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the 	period will apply and will expire SIX (6) MONTHS from the mailing date of this statute, cause the application to become ABANDONED (35 U.S.C. § 133). mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).	
Status 1) X Responsive to communication(s) filed on <u>Dec 27, 2</u>	
2a) ☑ This action is FINAL . 2b) ☐ This act	
	except for formal matters, prosecution as to the merits is
Disposition of Claims	
4) 💢 Claim(s) <u>1-21</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5)	is/are allowed.
6) 💢 Claim(s) 1-21	is/are rejected.
7)	
8)	are subject to restriction and/or election requirement.
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/are	
11) The proposed drawing correction filed on	is: a) \square approved b) \square disapproved.
12) The oath or declaration is objected to by the Exam	iner.
Priority under 35 U.S.C. § 119 13)□ Acknowledgement is made of a claim for foreign p a)□ All b)□ Some* c)□ None of:	riority under 35 U.S.C. § 119(a)-(d).
1. \square Certified copies of the priority documents have	ve been received.
2. Certified copies of the priority documents have	
 Copies of the certified copies of the priority d application from the International Bure *See the attached detailed Office action for a list of the 	
14) Acknowledgement is made of a claim for domestic	
Attachment(s)	
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:

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DETAILED ACTION

The amendment dated 12-27-01 is acknowledged.

Claims included in the prosecution are 1-21.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 5,908,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because instant generic 'surfactant' includes the specific surfactant recited in the claims of said patent.

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3. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,277,404. Although the conflicting claims are not identical, they are not patentably distinct from each other because instant generic liposomes encompass the liposomes recited with size ranges in the claims of said patent.

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that there is no suggestion in the cited patents to incorporate in the vesicles an active compound together with a compound for inhibiting the degradation of the active compound. This argument is not found to be persuasive since the claims in the patents recites polymers and polysaccharides which are recited in instant claims as stabilizers (see instant claim 12 for example). The rejections are maintained.

Claim Rejections - 35 USC § 102

- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

 A person shall be entitled to a patent unless --
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by CA 2133421 of record.

The Canadian patent discloses multimalellar vesicles containing stacked bilayers and made from both ionic and non-ionic surfactants. The vesicles contain either

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hydrophobic or hydrophilic active agents and also contain a polymer (polyacrylamide) (note page 2, line 12 through page 3, line 11, page 7, Examples and claims).

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant while agreeing that the Canadian reference is directed to vesicles of the same type as those presently claimed, argues that the stabilization of the structure of the vesicles by reinforcing their rigidity with a polymer and that this is purely a physical effect and that there is no disclosure or suggestion of stabilizing the active substance which is incorporated in the vesicles by incorporation of a stabilizing agent. This argument is not found to be persuasive since the rejected claims are composition claims which recite vaguely 'an agent for inhibiting degradation of active agent' and applicant has not shown that the component taught by the reference does not perform this function.

6. Claims 1-8 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/31194 of record.

WO discloses multilamellar non-phospholipid liposomes containing surfactants, retinol, tocopherol, vitamin C and other antioxidants (note the abstract, pages 9, 10, 13 and examples, Examples 7 and 8 in particular).

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that the reference teaches classical multilamellar liposomes containing an interior medium, whereas the liposomes of the invention include an aqueous medium which alternates continuously with the lipophilic medium. This argument is not

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found to be persuasive since instant claims do not distinguish over the prior art. In multilamellar liposomes, the aqueous medium is present between the multi-bilayers and thus alternates with the lipophilic medium. As stated above, instant claim language does not distinguish over the prior art liposomes.

7. Claims 1-8 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/18601 of record.

WO 95 discloses multilamellar liposomes, a method of preparation forming first a lamellar liquid crystalline phase and adding water. The active agents include vitamins, hydroxy acids and others (note the abstract, page 5, examples, Example 10 in particular).

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant's arguments are similar to those as argued for the rejection over the Canadian patent. Hence similar response is applicable. In essence, applicant while agreeing that the WO reference relates to a method for preparing the vesicles having the structure of those of the invention, argue that there is no disclosure of encapsulating within such vesicles an active agent together with an agent to inhibit degradation of the active agent. This argument is not found to be persuasive since instant claims recite vaguely 'an agent for inhibiting degradation of active agent' and the reference teaches vitamins such as C and E; it is well known that these are antioxidants and therefore, would prevent the

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oxidation of the active agent. Furthermore, this reference is provided by applicant and the difference argued cannot be determined in the absence of an English translation.

8. Claims 1-7 and 9-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Munechika (5,662,931).

Munechika discloses multilamellar liposomes containing lecithin, a surfactant and enzymes such as urokinase. The liposomes further contain, stearylamine, cholesterol and polysaccharides as stabilizers (note the abstract, columns 2-3, Examples).

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that Munechika teaches multilamellar vesicles and teaches stabilizers, but these stabilizers are used to physically stabilize the structure of the vesicles and not to prevent degradation of an active agent enclosed within the liposomes. This argument is not found to be persuasive since as applicant himself recognizes that the reference teaches the presence of antioxidants and it is within the skill of the art to realize that an antioxidant would protect any substance including the active agent if the active agent is susceptible to oxidation. Thus, though the reference does not explicitly state that function, such is implicit.

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *G.S. Kishore* whose telephone number is (703) 308-2440.

The examiner can normally be reached on Monday-Thursday from 6:30 A.M. to 4:00 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.K. Page, can be reached on (703)308-2927. The fax phone number for this Group is (703)305-3592.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [thurman.page@uspto.gov].

All Internet e-mail communications will be made of record in the application file.

PTO employees do not engage in Internet communications where there exists a possibility

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that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette

of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1235.

LS Keell

Gollamudi S. Kishore, Ph. D

Primary Examiner

Group 1600

gsk

March 18, 2002